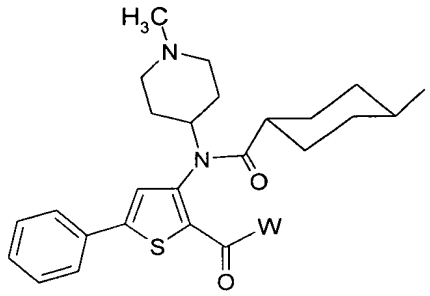
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A compound represented by formula I:

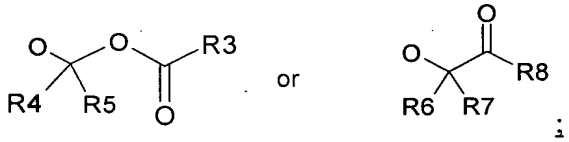


(I)

or a pharmaceutically acceptable salt ~~salts~~ thereof;

wherein;

W is C_{1-12} alkyloxy, C_{6-12} arylalkyloxy, amino acid ester, nucleoside, C_{6-12} heteroaralkyloxy, C_6 aryloxy, 5-6 membered heteroaryloxy,



R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl; [[.]]

R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle; and

R_6 and R_7 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle;

wherein

the above alkyl groups are each a straight chain or branched chain hydrocarbon moiety which optionally contain at least one unsaturated group and which is optionally substituted by one or more of halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido;

Rc and Rd are each independently H or C_{1-6} alkyl or Rc and Rd are taken together with the oxygen atoms to form a 5 to 10 membered heterocycle;

the above cycloalkyl groups are each a cyclic alkyl which optionally contain at least one unsaturated group;

the above alkyloxy are each an alkyl group as defined above which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino groups are each optionally substituted by alkyl, aryl, or arylalkyl;

the above amido groups are each $-CONH_2$, CONH(isopropyl), $CON(CH_3)_2$;

the above aryl groups are each a carbocyclic moiety containing at least one benzenoid-type ring which is optionally substituted by one or more of halogen, nitro, nitroso, $SO3C_{1-6}$ alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)$ C_{1-6} alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}$ C_{1-6} alkyl, cyano, azido, amidino or guanido;

the above aralkyl are each an aryl group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl;

the above aralkyloxy groups are each an aralkyl group which is covalently bonded to the adjacent atom through an oxygen atom;

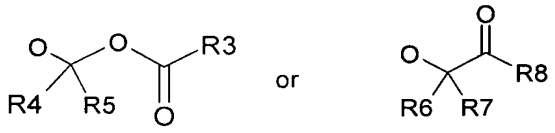
the above amino acid ester groups are each an essential or non-essential alpha amino acid, beta amino acid or esterified amino acid carboxylate;

the above heterocycle groups are each a saturated or unsaturated, cyclic moiety wherein

said cyclic moiety is interrupted by at least one heteroatom, selected from oxygen, sulfur and nitrogen, which is optionally substituted by halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido; and

the above heteroaralkyl groups are each a heterocycle group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl.

2. (Currently Amended): A compound of claim 1, wherein W is C_{1-12} alkyloxy, amino acid ester,



3. (Currently Amended): A compound of claim 1, wherein, R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; and ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl.

4. (Currently Amended): A compound of claim 1, wherein R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle.

5. (Currently Amended): A compound of claim 1, wherein R_4 and R_5 ~~R4 and R5 are taken~~ together ~~to~~ form a 3-6 membered cycloalkyl.

6. (Currently Amended): A compound of claim 1, wherein R_6 and R_7 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle. [[;]]

7. (Currently Amended): A compound of claim 1, wherein R_6 and R_7 ~~are taken~~ together ~~to~~ form a 3-6 membered cycloalkyl.

8. (Currently Amended): A compound of claim 1, wherein R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, or C_{3-10} heterocycle.

9. (Currently Amended): A compound selected from:

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2,2-DIMETHYL-PROPIONYLOXYMETHY;

4-[(2-ISOPROPOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4-[(2-ISOPROPYLCARBAMOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(5-METHYL-2-OXO-[1,3]DIOXOL-4-YLMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(ISOPROPOXYCARBONYLOXY-PHENYL-METHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXYLOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-

THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[(2,2-DIMETHYL-PROPIONYLOXY)-PHENYL-METHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-PROPIONYLOXYMETHOXYCARBONYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM; CHLORIDE;

4-[[2-(FURAN-2-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-BENZOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXANECARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-TERT-BUTOXYCARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10,13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-CARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10, 13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

4-[(2-ETHOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-

PHENOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(MORPHOLINE-4-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-2-METHYL-PROPOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-2-METHYL-PROPOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID TERT-BUTOXYCARBONYL-AMINOACETOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-TERT-BUTOXYCARBONYL-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID AMINOACETOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHYL ESTER;

4-[[2-(1-TERT-BUTOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-((4-METHYL-CYCLOHEXANECARBONYL)-{2-[1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-AMINO)-PIPERIDINIUM;

PYRROLIDINE-1,2-DICARBOXYLIC ACID 1-TERT-BUTYL ESTER 2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHYL} ESTER;

4-Methyl-piperazine-1-carboxylic acid 3-[(4-methyl-cyclohexanecarbonyl)-(1-methyl-piperidin-4-yl)-amino]-5-phenyl-thiophene-2-carbonyloxymethyl ester dihydrochloride salt;

4-[[2-(1-CYCLOHEXYLOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHOXYCARBONYL}-PYRROLIDINIUM; BIS-TRIFLUORO-ACETATE;

4-[[2-(1-ISOBUTYRYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID PYRIDIN-2-YL ESTER;

4-[[2-(1-ACETOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-

YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-OXO-PYRROLIDIN-1-YLMETHYL ESTER;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[5-PHENYL-2-(PYRIDIN-3-YLOXYCARBONYL)-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM; CHLORIDE;

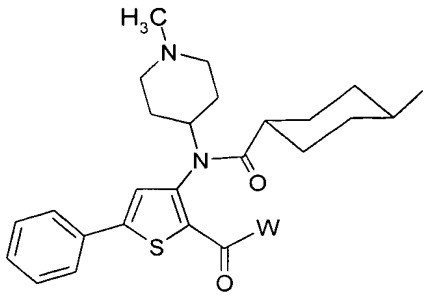
4-[{2-[1-(4-HYDROXY-5-HYDROXYMETHYL-TETRAHYDRO-FURAN-2-YL)-2-OXO-1,2-DIHYDRO-PYRIMIDIN-4-YLCARBAMOYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-2-METHYL-PROPYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-ETHYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM;

and ~~or~~ pharmaceutically acceptable salts thereof.

10. (Currently Amended): A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound of formula I:

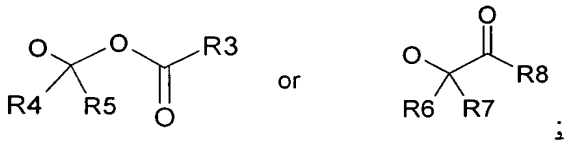


(I)

or a pharmaceutically acceptable salt ~~salts~~ thereof;

wherein;

W is C_{1-12} alkyloxy, C_{6-12} arylalkyloxy, amino acid ester, nucleoside, C_{6-12} heteroaralkyloxy, C_6 aryloxy, 5-6 membered heteroaryloxy,



or

;

R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl;

R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle; and

R_6 and R_7 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle;

wherein

the above alkyl groups are each a straight chain or branched chain hydrocarbon moiety which optionally contain at least one unsaturated group and which is optionally substituted by one or more of halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl,

C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido;

Rc and Rd are each independently H or C_{1-6} alkyl or Rc and Rd are taken together with the oxygen atoms to form a 5 to 10 membered heterocycle;

the above cycloalkyl groups are each a cyclic alkyl which optionally contain at least one unsaturated group;

the above alkyloxy are each an alkyl group as defined above which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino groups are each optionally substituted by alkyl, aryl, or arylalkyl;

the above amido groups are each $-CONH_2$, CONH(isopropyl), $CON(CH_3)_2$;

the above aryl groups are each a carbocyclic moiety containing at least one benzenoid-type ring which is optionally substituted by one or more of halogen, nitro, nitroso, $SO3C_{1-6}$ alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)$ C_{1-6} alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}$ C_{1-6} alkyl, cyano, azido, amidino or guanido;

the above aralkyl are each an aryl group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl;

the above aralkyloxy groups are each an aralkyl group which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino acid ester groups are each an essential or non-essential alpha amino acid, beta amino acid or esterified amino acid carboxylate;

the above heterocycle groups are each a saturated or unsaturated, cyclic moiety wherein said cyclic moiety is interrupted by at least one heteroatom, selected from oxygen, sulfur and nitrogen, which is optionally substituted by halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido; and

the above heteroaralkyl groups are each a heterocycle group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl.

11. (Currently Amended): A method of claim 10, further comprising administering at least one additional agent which is a ~~chosen from~~ viral serine protease inhibitor, viral polymerase inhibitor, viral helicase inhibitor, immunomudulating agent, antioxidant ~~antioxydant~~ agent, antibacterial agent, therapeutic vaccine, hepatoprotectant agent or antisense agent.

12. (Previously Presented): A method of claim 11, wherein the additional agent is interferon α, ribavirin, silybum marianum, interleukine-12, amantadine, ribozyme, thymosin, N-acetyl cysteine or cyclosporin.

13. (Previously Presented): A method according to claim 10, wherein the Flaviviridea viral infection is hepatitis C viral infection (HCV).

14. (Currently Amended): A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound selected from:

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2,2-DIMETHYL-PROPIONYLOXYMETHY;

4-[(2-ISOPROPOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4-[(2-ISOPROPYLCARBAMOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(5-METHYL-2-OXO-[1,3]DIOXOL-4-YLMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-

PIPERIDINIUM;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(ISOPROPOXYCARBONYLOXY-PHENYL-METHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXYLOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[(2,2-DIMETHYL-PROPIONYLOXY)-PHENYL-METHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-PROPIONYLOXYMETHOXYCARBONYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM; CHLORIDE;

4-[[2-(FURAN-2-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-BENZOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXANECARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-TERT-BUTOXYCARBONYLMETHYL-CARBAMOYL)-METHYL-

PROPYL)-7,12-DIHYDROXY-10,13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-CARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10, 13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

4-[(2-ETHOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXY-CARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(MORPHOLINE-4-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-2-METHYL-PROPOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-2-METHYL-PROPOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-

AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID TERT-BUTOXYCARBONYLAMINOACETOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-TERT-BUTOXYCARBONYL-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID AMINOACETOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHYL ESTER;

4-[[2-(1-TERT-BUTOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-((4-METHYL-CYCLOHEXANECARBONYL)-{2-[1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-AMINO)-PIPERIDINIUM;

PYRROLIDINE-1,2-DICARBOXYLIC ACID 1-TERT-BUTYL ESTER 2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHYL} ESTER;

4-Methyl-piperazine-1-carboxylic acid 3-[(4-methyl-cyclohexanecarbonyl)-(1-methyl-piperidin-4-yl)-amino]-5-phenyl-thiophene-2-carbonyloxymethyl ester dihydrochloride salt;

4-[[2-(1-CYCLOHEXYLOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-

THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHOXYCARBONYL}-PYRROLIDINIUM; BIS-TRIFLUORO-ACETATE;

4-[[2-(1-ISOBUTYRYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID PYRIDIN-2-YL ESTER;

4-[[2-(1-ACETOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-OXO-PYRROLIDIN-1-YLMETHYL ESTER;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[5-PHENYL-2-(PYRIDIN-3-YLOXYCARBONYL)-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM; CHLORIDE;

4-[{2-[1-(4-HYDROXY-5-HYDROXYMETHYL-TETRAHYDRO-FURAN-2-YL)-2-OXO-1,2-DIHYDRO-PYRIMIDIN-4-YLCARBAMOYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

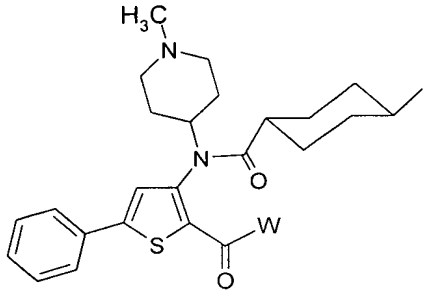
4-[[2-(1-METHOXYCARBONYL-2-METHYL-PROPYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-ETHYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-

YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM;

and ~~or~~ pharmaceutically acceptable salts thereof.

15. (Currently Amended): A pharmaceutical composition comprising at least one compound of formula I:

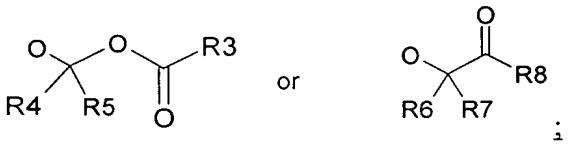


(I)

or a pharmaceutically acceptable salt ~~salts~~ thereof;

wherein;

W is C_{1-12} alkyloxy, C_{6-12} arylalkyloxy, amino acid ester, nucleoside, C_{6-12} heteroaralkyloxy, C_6 aryloxy, 5-6 membered heteroaryloxy,



R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl;

R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, -O(CO)C_{1-6} alkyl or C_{3-10} heterocycle; and

R_6 and R_7 are each independently chosen from H, C_{1-12} alkyl, C_{6-10} aryl, -O(CO)C_{1-6} alkyl or C_{3-10} heterocycle;

and at least one pharmaceutically acceptable carrier or excipient;

wherein

the above alkyl groups are each a straight chain or branched chain hydrocarbon moiety which optionally contain at least one unsaturated group and which is optionally substituted by one or more of halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido;

Rc and Rd are each independently H or C_{1-6} alkyl or Rc and Rd are taken together with the oxygen atoms to form a 5 to 10 membered heterocycle;

the above cycloalkyl groups are each a cyclic alkyl which optionally contain at least one unsaturated group;

the above alkyloxy are each an alkyl group as defined above which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino groups are each optionally substituted by alkyl, aryl, or arylalkyl;

the above amido groups are each $-CONH_2$, CONH(isopropyl), $CON(CH_3)_2$;

the above aryl groups are each a carbocyclic moiety containing at least one benzenoid-type ring which is optionally substituted by one or more of halogen, nitro, nitroso, $SO3C_{1-6}$ alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)$ C_{1-6} alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}$ C_{1-6} alkyl, cyano, azido, amidino or guanido;

the above aralkyl are each an aryl group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl;

the above aralkyloxy groups are each an aralkyl group which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino acid ester groups are each an essential or non-essential alpha amino acid, beta amino acid or esterified amino acid carboxylate;

the above heterocycle groups are each a saturated or unsaturated, cyclic moiety wherein said cyclic moiety is interrupted by at least one heteroatom, selected from oxygen, sulfur and

nitrogen, which is optionally substituted by halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido; and

the above heteroaralkyl groups are each a heterocycle group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl.

16. (Currently Amended): A pharmaceutical composition according to claim 15, further comprising at least one additional agent which is a ~~chosen from~~ viral serine protease inhibitor, viral polymerase inhibitor, viral helicase inhibitor, immunomudulating agent, antioxidant ~~antioxydant~~ agent, antibacterial agent, therapeutic vaccine, hepatoprotectant agent or antisense agent.

17. (Original): A pharmaceutical composition of claim 16, wherein the additional agent is interferon α, ribavirin, silybum marianum, interleukine-12, amantadine, ribozyme, thymosin, N-acetyl cysteine or cyclosporin.

18. (Currently Amended): A pharmaceutical composition comprising at least one compound selected from:

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2,2-DIMETHYL-PROPIONYLOXYMETHY;

4-[(2-ISOPROPOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4-[(2-ISOPROPYLCARBAMOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(5-METHYL-2-OXO-[1,3]DIOXOL-4-YLMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-

PIPERIDINIUM;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(ISOPROPOXYCARBONYLOXY-PHENYL-METHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXYLOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[(2,2-DIMETHYL-PROPIONYLOXY)-PHENYL-METHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-PROPIONYLOXYMETHOXYCARBONYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM; CHLORIDE;

4-[[2-(FURAN-2-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-BENZOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXANECARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-TERT-BUTOXYCARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-

DIHYDROXY-10,13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-CARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10,13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXY-CARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

4-[(2-ETHOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(MORPHOLINE-4-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-2-METHYL-PROPOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-2-METHYL-PROPOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID TERT-BUTOXYCARBONYL-AMINOACETOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-TERT-BUTOXYCARBONYLAMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID AMINOACETOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHYL ESTER;

4-[[2-(1-TERT-BUTOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-((4-METHYL-CYCLOHEXANECARBONYL)-{2-[1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-AMINO)-PIPERIDINIUM;

PYRROLIDINE-1,2-DICARBOXYLIC ACID 1-TERT-BUTYL ESTER 2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHYL} ESTER;

4-Methyl-piperazine-1-carboxylic acid 3-[(4-methyl-cyclohexanecarbonyl)-(1-methyl-piperidin-4-yl)-amino]-5-phenyl-thiophene-2-carbonyloxymethyl ester dihydrochloride salt;

4-[[2-(1-CYCLOHEXYLOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHOXYCARBONYL}-PYRROLIDINIUM; BIS-TRIFLUORO-ACETATE;

4-[[2-(1-ISOBUTYRYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID PYRIDIN-2-YL ESTER;

4-[[2-(1-ACETOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-OXO-PYRROLIDIN-1-YLMETHYL ESTER;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[5-PHENYL-2-(PYRIDIN-3-YLOXYCARBONYL)-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM; CHLORIDE;

4-[{2-[1-(4-HYDROXY-5-HYDROXYMETHYL-TETRAHYDRO-FURAN-2-YL)-2-OXO-1,2-DIHYDRO-PYRIMIDIN-4-YLCARBAMOYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

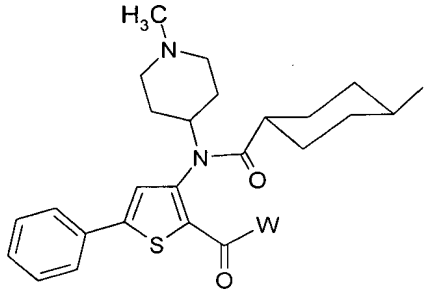
4-[[2-(1-METHOXYCARBONYL-2-METHYL-PROPYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-ETHYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM;

and ~~or~~ pharmaceutically acceptable salts thereof;

and at least one pharmaceutically acceptable carrier or excipient.

19. (Currently Amended): A method for inhibiting or reducing the activity of viral polymerase in a host comprising administering to the host a therapeutically effective amount of at least one compound of formula I:

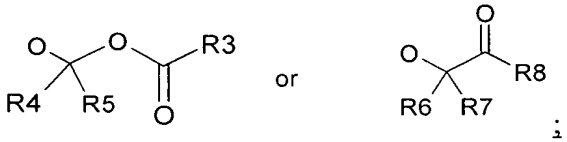


(I)

or a pharmaceutically acceptable salt ~~salts~~ thereof;

wherein;

W is C_{1-12} alkyloxy, C_{6-12} arylalkyloxy, amino acid ester, nucleoside, C_{6-12} heteroaralkyloxy, C_6 aryloxy, 5-6 membered heteroaryloxy,



;

R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl;

R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle; and

R_6 and R_7 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, $-O(CO)C_{1-6}$ alkyl or C_{3-10} heterocycle; and

at least one pharmaceutically acceptable carrier or excipient;

wherein

the above alkyl groups are each a straight chain or branched chain hydrocarbon moiety which optionally contain at least one unsaturated group and which is optionally substituted by one or more of halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido;

Rc and Rd are each independently H or C_{1-6} alkyl or Rc and Rd are taken together with the oxygen atoms to form a 5 to 10 membered heterocycle;

the above cycloalkyl groups are each a cyclic alkyl which optionally contain at least one unsaturated group;

the above alkyloxy are each an alkyl group as defined above which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino groups are each optionally substituted by alkyl, aryl, or arylalkyl;

the above amido groups are each $-CONH_2$, CONH(isopropyl), $CON(CH_3)_2$;

the above aryl groups are each a carbocyclic moiety containing at least one benzenoid-type ring which is optionally substituted by one or more of halogen, nitro, nitroso, $SO3C_{1-6}$ alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)$ C_{1-6} alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}$ C_{1-6} alkyl, cyano, azido, amidino or guanido;

the above aralkyl are each an aryl group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl;

the above aralkyloxy groups are each an aralkyl group which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino acid ester groups are each an essential or non-essential alpha amino acid, beta amino acid or esterified amino acid carboxylate;

the above heterocycle groups are each a saturated or unsaturated, cyclic moiety wherein said cyclic moiety is interrupted by at least one heteroatom, selected from oxygen, sulfur and nitrogen, which is optionally substituted by halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl,

$C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O$-C_{1-6} alkyl, cyano, azido, amidino or guanido; and

the above heteroaralkyl groups are each a heterocycle group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl.

20. (Original): A method of claim 19, wherein viral polymerase is a Flaviviridae viral polymerase.

21. (Currently Amended): A method for inhibiting or reducing the activity of viral polymerase in a host comprising administering a therapeutically effective amount of at least one compound selected from:

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2,2-DIMETHYL-PROPIONYLOXYMETHY;

4-[(2-ISOPROPOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4-[(2-ISOPROPYLCARBAMOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(5-METHYL-2-OXO-[1,3]DIOXOL-4-YLMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(ISOPROPOXYCARBONYLOXY-PHENYL-METHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXYLOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[{2-[(2,2-DIMETHYL-PROPIONYLOXY)-PHENYL-METHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-PROPIONYLOXYMETHOXYCARBONYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM; CHLORIDE;

4-[[2-(FURAN-2-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-BENZOYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-CYCLOHEXANECARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-TERT-BUTOXYCARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10,13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXYCARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(5-PHENYL-2-SUCCINYL-17(3-CARBONYLMETHYL-CARBAMOYL)-METHYL-PROPYL)-7,12-DIHYDROXY-10, 13-DIMETHYL-HEXADECAHYDRO-CYCLOPENTA(A)PHENANTHREN-3-YLOYMETHOXY-CARBONYL-THIOPHEN-3-YL)AMINO-PIPERIDINIUM CHLORIDE;

4-[(2-ETHOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXY-CARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[2-(MORPHOLINE-4-CARBONYLOXYMETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM CHLORIDE;

4-[{2-[1-(2,2-DIMETHYL-PROPIONYLOXY)-2-METHYL-PROPOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-2-METHYL-PROPOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[(2-SEC-BUTOXYCARBONYLOXYMETHOXYCARBONYL-5-PHENYL-THIOPHEN-3-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID TERT-BUTOXYCARBONYL-AMINOACETOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-TERT-BUTOXYCARBONYL-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID AMINOACETOXYMETHYL

ESTER , BIS TRIFLUOROACETATE SALT;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-AMINO-3-METHYL-BUTYRYLOXYMETHYL ESTER, BIS TRIFLUOROACETATE SALT;

4-[[2-(1-ISOPROPOXYCARBONYLOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHYL ESTER;

4-[[2-(1-#TERT!-BUTOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

1-METHYL-4-((4-METHYL-CYCLOHEXANECARBONYL)-{2-[1-(1-METHYL-CYCLOHEXANECARBONYLOXY)-ETHOXYCARBONYL]-5-PHENYL-THIOPHEN-3-YL}-AMINO)-PIPERIDINIUM;

PYRROLIDINE-1,2-DICARBOXYLIC ACID 1-TERT-BUTYL ESTER 2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHYL} ESTER;

4-Methyl-piperazine-1-carboxylic acid 3-[(4-methyl-cyclohexanecarbonyl)-(1-methyl-piperidin-4-yl)-amino]-5-phenyl-thiophene-2-carbonyloxymethyl ester dihydrochloride salt;

4-[[2-(1-CYCLOHEXYLOXYCARBONYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

2-{3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBONYLOXYMETHOXYCARBONYL}-PYRROLIDINIUM; BIS-TRIFLUORO-ACETATE;

4-[[2-(1-ISOBUTYRYLOXY-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM;

CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID PYRIDIN-2-YL ESTER;

4-[[2-(1-ACETOXY-1-METHYL-ETHOXYCARBONYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID 2-OXO-PYRROLIDIN-1-YLMETHYL ESTER;

1-METHYL-4-[(4-METHYL-CYCLOHEXANECARBONYL)-(2-PHENOXY-CARBONYL-5-PHENYL-THIOPHEN-3-YL)-AMINO]-PIPERIDINIUM CHLORIDE;

1-METHYL-4-{(4-METHYL-CYCLOHEXANECARBONYL)-[5-PHENYL-2-(PYRIDIN-3-YLOXYCARBONYL)-THIOPHEN-3-YL]-AMINO}-PIPERIDINIUM; CHLORIDE;

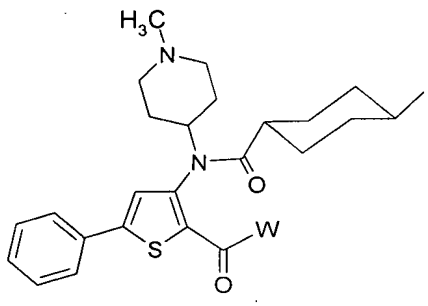
4-[{2-[1-(4-HYDROXY-5-HYDROXYMETHYL-TETRAHYDRO-FURAN-2-YL)-2-OXO-1,2-DIHYDRO-PYRIMIDIN-4-YLCARBAMOYL]-5-PHENYL-THIOPHEN-3-YL}-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-2-METHYL-PROPYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4-[[2-(1-METHOXYCARBONYL-ETHYLCARBAMOYL)-5-PHENYL-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM;

and ~~or~~ pharmaceutically acceptable salts thereof.

22. (Currently Amended): A combination comprising a least one compound of formula I:

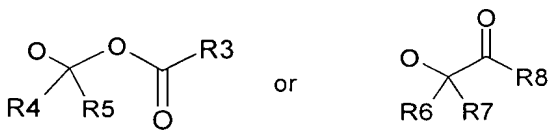


(I)

or a pharmaceutically acceptable salt ~~salts~~ thereof;

wherein;

W is C_{1-12} alkyloxy, C_{6-12} arylalkyloxy, amino acid ester, nucleoside, C_{6-12} heteroaralkyloxy, C_6 aryloxy, 5-6 membered heteroaryloxy,



R_3 and R_8 are each independently ~~chosen from~~ C_{1-12} alkyl, C_{6-10} aryl, C_{6-10} arylalkyl, C_{3-10} heterocycle, C_{3-12} heteroaralkyl, C_{6-12} aralkyl, C_{1-12} alkyloxy, C_{6-10} aryloxy or $NR_{10}R_{11}$; ~~wherein~~

R_{10} and R_{11} are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl;

R_4 and R_5 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, -O(CO)C_{1-6} alkyl or C_{3-10} heterocycle; and

R_6 and R_7 are each independently ~~chosen from~~ H, C_{1-12} alkyl, C_{6-10} aryl, -O(CO)C_{1-6} alkyl or C_{3-10} heterocycle;

and one or more additional agent which is a ~~chosen from~~ viral serine protease inhibitor, viral polymerase inhibitor and viral helicase inhibitor, immunomudulating agent, antioxidant ~~antioxydant~~ agent, antibacterial agent, therapeutic vaccine, hepatoprotectant agent or antisense agent;

wherein

the above alkyl groups are each a straight chain or branched chain hydrocarbon moiety

which optionally contain at least one unsaturated group and which is optionally substituted by one or more of halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl, cyano, azido, amidino or guanido;

Rc and Rd are each independently H or C_{1-6} alkyl or Rc and Rd are taken together with the oxygen atoms to form a 5 to 10 membered heterocycle;

the above cycloalkyl groups are each a cyclic alkyl which optionally contain at least one unsaturated group;

the above alkyloxy are each an alkyl group as defined above which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino groups are each optionally substituted by alkyl, aryl, or arylalkyl;

the above amido groups are each $-CONH_2$, CONH(isopropyl), $CON(CH_3)_2$;

the above aryl groups are each a carbocyclic moiety containing at least one benzenoid-type ring which is optionally substituted by one or more of halogen, nitro, nitroso, $SO3C_{1-6}$ alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)$ C_{1-6} alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}$ C_{1-6} alkyl, cyano, azido, amidino or guanido;

the above aralkyl are each an aryl group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl;

the above aralkyloxy groups are each an aralkyl group which is covalently bonded to the adjacent atom through an oxygen atom;

the above amino acid ester groups are each an essential or non-essential alpha amino acid, beta amino acid or esterified amino acid carboxylate;

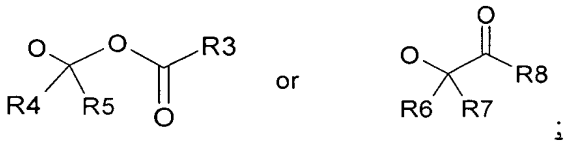
the above heterocycle groups are each a saturated or unsaturated, cyclic moiety wherein said cyclic moiety is interrupted by at least one heteroatom, selected from oxygen, sulfur and nitrogen, which is optionally substituted by halogen, nitro, nitroso, SO_3C_{1-6} alkyl, SO_2C_{1-6} alkyl, PO_3RcRd, amido, C_{1-6} alkyl, C_{6-12} aralkyl, C_{6-12} aryl, C_{1-6} alkyloxy, C_{6-12} aryloxy, $C(O)C_{1-6}$ alkyl, $C(O)C_{6-12}$ aryl, $C(O)C_{6-12}$ aralkyl, C_{3-10} heterocycle, hydroxyl, amino, COOH, $C(O)O\text{-}C_{1-6}$ alkyl,

cyano, azido, amidino or guanido; and

the above heteroaralkyl groups are each a heterocycle group attached to the adjacent atom by a C_{1-6} alkyl, C_{1-6} alkenyl, or C_{1-6} alkynyl.

23. (New): A compound according to claim 1, wherein:

W is



R_3 or R_8 are each methyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethyl, fluoroethyl difluoroethyl, trifluoroethyl, propyl, isopropyl, cyclopropyl, butyl, isobutyl, t-butyl, pentyl, cyclopentyl, hexyl, cyclohexyl, methoxy, ethyloxy, propyloxy, isopropyloxy, cyclopropyloxy, t-butyloxy, phenyl, phenoxy, thienyl, furanyl, pyridyl, oxazolyl, thiazolyl, pyrrolyl, benzofuranyl, indolyl, benzoxazolyl, benzothienyl, benzothiazolyl, quinolinyl, pyridinyl, thiophenyl, benzofuran, thiazolyl, pyrazolyl, pyridinyl, isoxazolyl or tetrazolyl;

R_4 is H, methyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethyl, fluoroethyl difluoroethyl, trifluoroethyl, propyl, isopropyl, cyclopropyl, butyl, isobutyl, t-butyl, pentyl, cyclopentyl, hexyl, cyclohexyl, or phenyl;

R_5 is H;

R_6 is H, methyl, fluoromethyl, difluoromethyl, trifluoromethyl, ethyl, fluoroethyl difluoroethyl, trifluoroethyl, propyl, isopropyl, cyclopropyl, butyl, isobutyl, t-butyl, pentyl, cyclopentyl, hexyl or cyclohexyl; and

R_7 is H.